T910

DMX512 Controller

User Manual

Before using this controller, please read this notebook carefully.

- **Instructions**

Thank you for choosing our T910 DMX512 controller. Before installing and using it, please read this notebook carefully to ensure fully understand the functions and characters of the production to avoid the unnecessary damage.

- **Install direction**

1. Please avoid the mine field, strong magnetic field and high voltage when you install.
2. Ensure the connection is right, the positive, negative polarity, signal lines and RGB Output lines must be defined consistent to the user manual.
3. Please install the controller in well-ventilated places to ensure moderate temperature condition.
4. Input voltage is from DC 12v to 24v; please choose the right electrical source.
5. Prohibit live wiring, check the lead wiring is correct, and then work!
6. If any problems do not make unauthorized repairs, any doubts please contact your local supplier.

- **After-sale services**

Warranty of this product is one year, in this period we guarantee repairing or replacement service with no charge if it is normally used according to the instruction.

If the customer does not follow the instructions and following provisions in this manual, which results in product damage, the supplier is not responsible for any problems arising and defects, even in the warranty period, maintenance costs borne by the customer.

1. Damage caused by wrong operation, such as not according to the using specification.
2. Damage caused by wrong connection, removing, servicing and changing electro circuit and exchanging the CMOS chip privately.
3. Damage caused by transportation, shock, fall after purchase.
4. Damage caused by earthquake, fire, flood, lightning strike and abnormal voltage.
5. Damage caused by negligence or improper maintenance, such as storage at high temperature and humid environment, vicinity of hazardous chemical substances.
6. Replacement of products.

This manual applies only to this product of our company, subject to changes without notice.

- **Introduction**

T910 DMX 512 controller is dedicated to LED light controlling for indoor or outdoor decoration. 256 levels grey scale of each R, G, B, can mix out 16 million colors. Remote control or Panel control is optional. More than 30 color changing modes, 255 levels grey scale adjustment and 16 levels speed adjustment. Pause function can easily save certain unique colors.

Welcome to use T920（RGB）DMX512 30 channels decoder. This production uses advanced micro-electronics control technique, converts the international standard digital control signal into virtual control signal. Having 30 separate channels, each channel can realize 256 levels brightness adjustment. Through dial up the state of the “10” can choose DMX working mode or Manual working mode. In the manual working mode, it can help you test your wire connection better. Use this decoder, with other DMX master controller or DMX512 control plat, the user can make a complete controlling system for led lamps.

1. Technology specifications

Type	T910-DMX512
Input power	DC12V
Output signal	DMX512
Control method	Asynchronous control
Max load power	＜5W
transmission speed	250Kbps

2. Functions

(1).Control way: Panel keys control with remote control, valid in 50M (No barriers),

(2). Meet the standards of DMX 512 international protocol.

(3).Can realize 256 levels grey scale for each color of RGB, totally about 16 million colors.

(4).Many changing modes are built in as well as Pause function.

(5).Good performance in anti-interference, can recover automatically when system fails..

(6).Simple wiring and easy installation

(7). Output port supported: XLR-3(female and male)/1: GND; 2: DMX-(B); 3: DMX+(A)

(8). Lamp controlled: 50 pixel, 170 pixel the most (1 pixel is 3 channel, set up according to the pixel point)

(9). Can control projection lamps, contour lights, underground lamps, underwater lamps etc.

3. Structure

(1).View of major controller and functions: (chart 1)

① **LCD screen: (LMB162A)**

② **MODE: press this key to change modes**

③ **SET: press this key to keep the present color**

④ **UP: press this key to speed up.**

⑤ **DOWN: press this key to speed down.**

Operation: Two state, one is operating state and the other is pause. Use SET key to realize mode shift. Under the mode of operation, use MODE key to choose the effects, and UP or DOWN key to change the speed or grey scale for current light effect. The first line in the LCM shows “PROGRAM: XX”, “XX” stands for the current mode number(this controller has 30 modes totally), program 1~7； The second line shows “Brightness: XX”, “XX” stands for the grey scale of current effects (Max is 255, min is 1, the larger the number, the brighter, otherwise the darker), Program8~30; the “SPEED: XX”, “XX” stands for the speed of current effect (Max is 16, min is 1, the larger the number, the slower, otherwise the faster)

Under PAUSE state, press UP or DOWN to change the pixel value (Stepping is 1, range: 50~170), the first line in the LCM shows “PAUSE STATUS” the second line shows “PIXEL VALUE: XXX”, “XXX” stands for the current pixel value.

(2).View of backside settings: (chart 2)

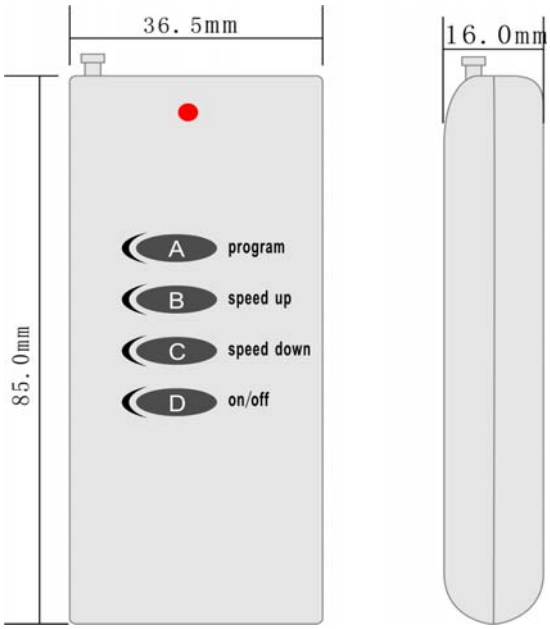
① Voltage input port

② Power switch

③ XLR 3 male output port

④ XLR 3 male input port

(3).View of remote controller: (chart 3)



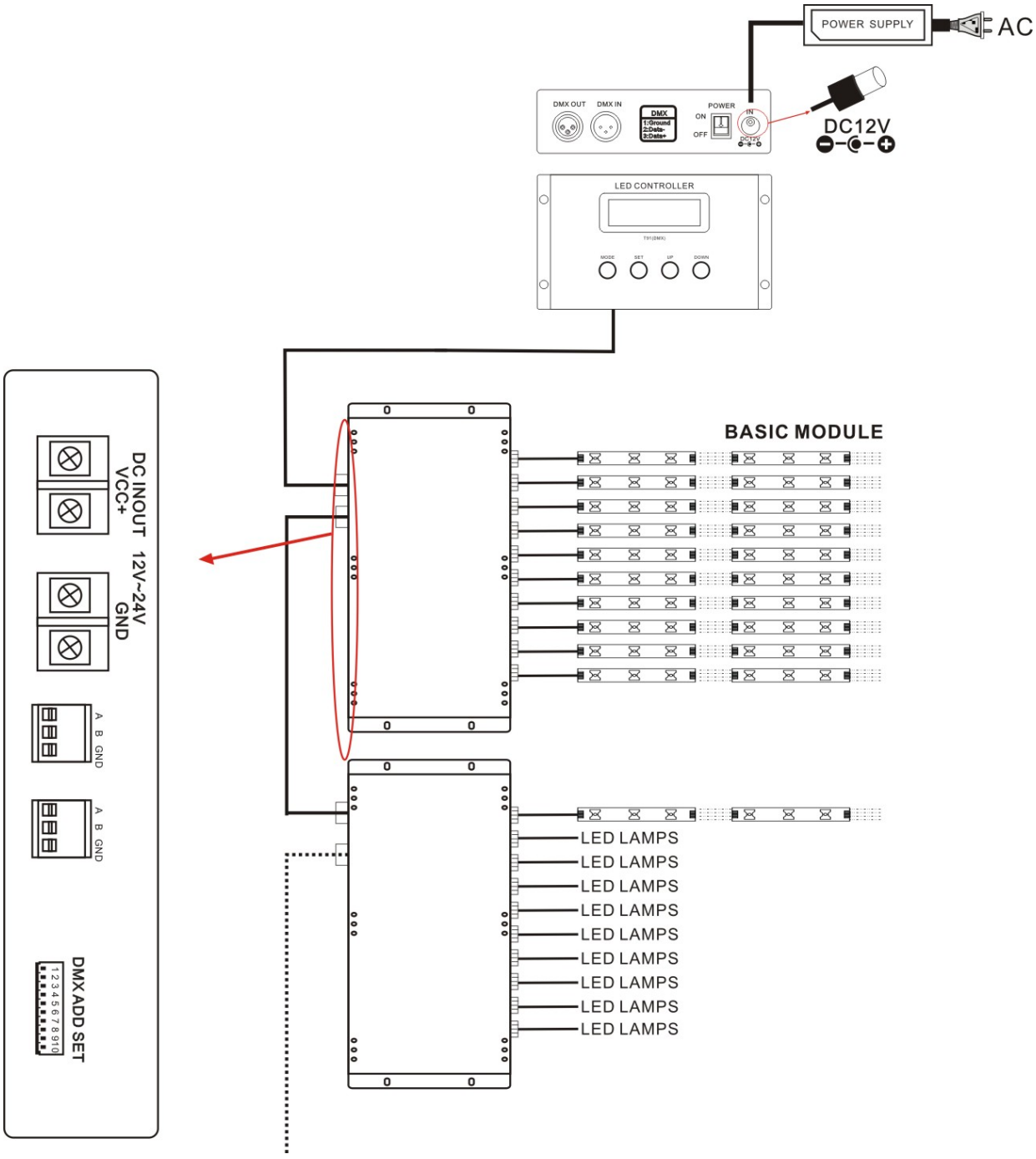
① A: program: press this key to change modes.

② B: speed up: press this key to speed up the light for one level (the fastest level is the fault)

③ C: speed down: press this key to down the speed of the light for one level

④ D: set: press this key to keep the current light color (Pause state); press again to the operation state.

4. Connection diagram of controller (Chart 4)



5. Descriptions on modes. (Table 1)

No.	Mode	Remark
1	Static red	All channels the same color under this mode
2	Static green	All channels the same color under this mode
3	Static blue	All channels the same color under this mode
4	Static yellow	All channels the same color under this mode
5	Static light blue	All channels the same color under this mode
6	Static purple	All channels the same color under this mode
7	Static white	All channels the same color under this mode
8	7-color gradual change	
9	Full color gradual change	
10	Change like rainbow	
11	Change like running water	
12	Chase one by one	
13	Colors piling up	
14	Blue and purple chases	
15	6-color flickering	
16	RGB flickering	
17	RG flickering	
18	RB flickering	
19	GB flickering	
20	R flickering	
21	G flickering	
22	B flickering	
23	7-color jump change	
24	6-color jump change	

25	RGB jump change	
26	RG jump change	
27	RB jump change	
28	GB jump change	
29	White color jump change	
30	Mode1~29 automatically change	

6. Failure analysis and solutions (Table 2)

Failure	Analysis	Solutions
No light	1. No power. 2. Reversed the polarity. 3. Wrong connection or poor contact. 4. LED light is bad.	1. Check the power 2. Make sure the polarity is right. 3. Re-check the wire connection, make sure 4 groups signal lines and GND line connect right.
Brightness of LED is not consistent	1. Input wire is too long to cause wire loss. 2. Diameter of wire is too thin to cause wire loss. 3. Power overload. 4. Controller overload.	1. Shorten wire or use loop circuit. 2. Calculate the current, and then replace thick wire. 3. Replace larger power. 4.Add a power amplifier

Tips: The effective power is generally only 80% of the marked power, so it is recommended in selecting the power supply, the user choose a slightly larger one than the LED load power, at least for more than 20%!